

## ABSTRACT

A method for detecting whether methyladenosine phosphatase (MTAse) is present in a cell sample. In one respect, the method comprises adding oligonucleotide probes to the sample, which probes are capable of specifically hybridizing to any MTAse encoding nucleic acid in the sample under conditions favoring that hybridization. 5 Absence of MTAse in a sample is considered to be indicative of malignancy. Polynucleotides encoding MTAse, MTAse peptides and antibodies to MTAse, as well as kits for performing the methods of the invention, are provided.

26603.LJ1